

ABSTRACT

Capturing Depolarization Information in GPS Reflections

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The state of the surface of the ocean has a prominent effect on the depolarization of the circularly polarized emissions of the GPS satellites. The system designer's election to capture the important information carries with it the need to implement the data extraction in a cost efficient manner. Antenna components, and associated networks for deriving depolarization information are described. For typical sea states the polarization characteristics of the reflected GPS signal vary rapidly with time so various methods for recording the changes are discussed.